

Remarks

I. Status of the Claims

In the Office Action, the Examiner indicated that claims 1-33 are pending. Claims 1-20 are rejected, and claims 9-13 are objected to. Claims 21-33 are withdrawn from consideration.

II. Objection of Claim 17 under 35 U.S.C. 102

In paragraph 3 of the office action, the Examiner objected to claim 17 which “seems to contain a typographical error where the word ‘of’ should be inserted between the two underlined text as suggested by the Examiner.” In response, Applicant has amended claim 17 to insert the word “of” as suggested by the Examiner. Applicant believes this overcomes the objection to claim 17.

III. Rejection of Claims 1 and 15 under 35 U.S.C. 102(b)

In paragraph 5 of the office action, the Examiner rejected claims 1 and 15 under 35 U.S.C. 102(b) as being anticipated by Yabu (4,907,021). Applicants believe these rejections are moot in view of amendments made as described below under the section, “Allowable Subject Material”.

IV. Claim Rejections – 35 USC § 103

In paragraphs 7-13, the Examiner rejects claims 2, 14, 3-6 and 8, 7, 16, 17 and 20, 18 and 19 over various combinations of references.

Applicant believe rejections of claims 2, 14, 3-6, 8, 7, 16, 17 and 20, 18 and 19 are moot in view of amendments made as described below under the section, “Allowable Subject Material.”

It will be noted that not all of the claims rejected under 35 USC 103 were listed in the Examiner’s “Allowable Subject Material”; however, those claims have been amended to depend from Claim 1, which has been amended according to the Examiner’s suggestion to make it allowable.

V. Allowable Subject Material

In paragraph 15, the Examiner states, “Claims 9-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.”

In response, Applicants have amended claim 1 to include all the limitations of claim 1, 2, 3, 4, and 9, as suggested by the Examiner. Claims 2, 3, and 4 are cancelled. Applicant submits that claims 1 and 15 (which depends from Claim 1), amended as suggested by the Examiner, are now allowable. Claims 10-13 have been amended to depend from Claim 1 instead of Claim 9. Claims 10-13, objected to above by the Examiner, should now be allowable.

Claims 5 and 6 have been amended to depend from Claim 1. Claim 1 should now be allowable, and therefore, Claims 5 and 6 should be allowable. However, after reading the Examiner’s interpretation of “angular movement”, Applicants have further amended Claims 5 and 6 to clarify that “angular movement” is “pivotal movement” as taught in the specification. On page 6 of the Office Action, the Examiner states: “Regarding claims 5 and 6, Johnson further discloses ‘wherein said final lens element is capable of angular movement about an axis ([0042], lines 3-4).’ Paragraph [0042] of Johnson states: *“Although the first and second embodiment of the device 22 only move the lens in the x-axis 52 or y-axis 54 planer(sic) directions, alternatively the device 22 may be jogged in 45 degree angles or other angles. Also, in other embodiments, the amount that the pixel image is jogged may be any fixed amount, for example, 1/10 or 1/3 a pixel length, depending on the desired number of pixels per unit area. Accordingly, the duration of each exposure is also intelligently adjusted depending on the total number of jogging positions used for each exposure.”* Johnson indeed teaches moving the lens in an x or y direction as well as at angles in the x-y plane. The angles that Johnson’s lens moves in are always on a plane parallel to image plane 20. That is, the lens in Johnson is never pivoted, as is taught in Applicants application. Applicant’s “angular movement about an axis” is directed to pivotal movement about an axis as taught in Applicants’ [0022], *“Final lens element 103 of FIG. 1 is coupled to a second motion control device 105 at one or more coupling points 110. Final lens element 103 then pivots on an axis defined by coupling point 110 when the apparatus is operably running.”* Applicants believe that “angular movement about an axis” is well defined in the application. For example, in paragraph [0011], *“The lens apparatus is coupled to a motion*

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*control device capable of adjusting the final lens' angular orientation relative to the wafer."*

Applicants also refer to "angular velocity" in a number of places, e.g., paragraphs [0026], [0027], and [0028].

Nonetheless, Applicants agree that "angular movement" might be unclear without a careful read of the specification. Applicants have amended Claims 5 and 6 to use the word "pivotal" instead of "angular" to more clearly specify that the lens is pivoting. Applicant has ample support of "pivotal" in the claims, e.g., in paragraphs [0023], "*Final lens element 103 pivots on coupling point 110*"; [0025] "*Note that, as final lens element 103 moves (e.g., pivots about an axis,...*". Applicants respectfully ask that the Examiner reconsider claims 5 and 6 as amended to depend from Claim 1, and to clarify the pivoting motion of the final lens element and withdraw his rejections to claims 5 and 6.

Applicants have amended claim 14 to depend from claim 1, which Applicants believe is allowable, as amended as suggested by the Examiner. Claim 14 had been rejected under 35 USC 103(a) in paragraph 8 as unpatentable over Yabu in view of Suwa. Applicants submit that, if claim 1 is allowable, claim 14 is allowable.

Claim 8 was rejected in Office Action paragraph 9 under 35 U.S.C. 103(a) as being unpatentable over Yabu in view of Suwa, as applied to claim2, and in further view of Johnson (US 2002/0080226). Claim 8 has been amended to depend from Claim 1 which, as amended, is believed to be allowable. Claim 8, as amended, should also be allowable.

Claim 7 was rejected in Office Action paragraph 10 under 35 U.S.C. 103(a) as being unpatentable over Yabu and Suwa in view of Johnson, as applied to claims 3-6, and in further view of Hazard (4,978,212). Claim 7 has been amended to depend from Claim 1 which, as amended, is believed to be allowable. Claim 7, as amended, should also be allowable.

Claims 16-20 depend from claim 1, which is believed to be allowable as amended. Therefore, claims 16-20, which were rejected under 35 USC 103(a) in Office Action paragraphs 11, 12, and 13, are also allowable.

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In view of the foregoing, Applicants respectfully submit that the pending claims (i.e., claims 1, 5-8, and 10-20) are in condition for allowance and respectfully request that the application with claims 1, 5-8 and 10-20 be allowed and passed to issue. The Examiner is encouraged to contact applicants' agent by telephone if there are outstanding issues left to be resolved to place this case in condition for allowance.

Respectfully submitted,  
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